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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/936,103	09/07/2001	Qiang Cao	CAO 16-4-3	9434
7590 05/17/2005 Lucent Technologies Inc 600 Mountain Avenue PO Box 363 Murray Hill, NJ 07974-0636			EXAMINER PARK, JUNG H	
			ART UNIT 2661	PAPER NUMBER

DATE MAILED: 05/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/936,103

Applicant(s)

CAO ET AL.

Examiner

Jung Park

Art Unit

2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 07 September 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

### DETAILED ACTION

1. Claims 1-5 are pending for the examination.

#### *Priority*

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

#### *Drawings*

3. The drawings are objected to because:

In Figure 1, " $SF=2^k$ ,  $SF=2^{k+1}$  and  $SF=2^{k+2}$ " should be changed into " $SF=2^{k-1}$ ,  $k=1, \dots, 9$ " since the OVSF sequences are denoted by  $C_{x,y}$  ( $y=1, \dots, x$ ;  $x=2^{k-1}$ ,  $k=1, \dots, 9$ ). (See line 4 of page 4 in the specification).

Figure 1 and 6 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Specification***

4. This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.
5. The disclosure is objected to because of the following informalities:

In line 1 of page 6, the number “4 and 8” should be changed to --8 and 16-- since this applicant uses the numbers for the example of the second user. (See line 28-30 of page 8). Appropriate correction is required.

*Claim Rejections - 35 USC § 102*

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1 and 2 are rejected under 35 U.S.C. 102(e) as being anticipated by Felix et al.

(U.S. 6,233,231, hereafter “Felix”).

As to claim 1, Felix teaches a method of communicating a selected channelization code for a downlink to a user (*transmitting a proper OVSF code tree to a remote unit*, col. 5, table 1, lines 33-34), comprising: transmitting a set of nodes of a code tree comprising a defined path of the tree for the user (*assigning an allocated branch of the code tree to the remote unit*, col. 5, table 1, lines 40-41) and transmitting an identifier identifying one of the set of nodes to be used (*transmitting an identifier identifying the branch allocation*, col. 5, table 1, lines 38-39).

As to claim 2, although Felix teaches the method of communicating a selected channelization code, Felix is silent on when the set of nodes (*the specific branch of the code tree*) are transmitted to the user. However, it is inherent that a code allocation unit allocates one of OVSF codes to a radio access connection session for use as a channelization code.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Felix.

As to claim 3, Felix is silent on where the allocated branch is located. However, it is well known in the art that radio access connection is implemented by including allocated branch in the transport format during the RAB session. Hence, it would have been obvious to combine this well known art with Felix for the purpose of transmitting a set of nodes to a user. The motivation is to include a set of nodes into a transport format set for a user to know a selected channelization code.

As to claims 4 and 5, Felix is silent to the transfer formation of the identifier. Sending the identifier in a data packet or a bit stream is one to design choice. Hence, it would have been obvious to combine this design choice with Felix for the purpose of transmitting the identifier in a data packet to the user. Also, it is obvious that the identifier included in the data packet or the bit streams can be located in a transport format combination indicator (TFCI) of a dedicated physical control channel. The motivation is to include an identifier into a TFCI in a data packet for informing a user of an allocated branch.

***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- U.S. Patent (6,526,065) to Cheng teaches an optimal code assignment algorithm.
  - U.S. Patent (6,680,902) to Hudson teaches employing a subset of codes to reduce the bit rate.
  - U.S. Patent (6,108,639) to Ovesjo teaches the way of assigning spreading code in order to make the control channel be orthogonal to all physical channels.
  - U.S. Patent (6,400,755) to Harris et al. teach the way of changing the OVSF code in order to gradually increase the data rate.
  - U.S. Patent (6,693,952) to Chuah et al. teach how a code-tree is partitioned into two sets.
  - U.S. Patent (6,560,194) to Gourgue teaches a method of allocating orthogonal codes in a code division multiple access mobile radio system using codes of variable length.

***Contact Information***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jung Park whose telephone number is 571-272-8565. The examiner can normally be reached on Mon-Fri during 7:15-4:45.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on 571-272-3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jung Park  
Patent Examiner  
March 13, 2005



**KENNETH VANDERPUYE**  
**PRIMARY EXAMINER**